

\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* STN Columbus \* \* \* \* \* \* \* \* \* \* \* \* \*

FILE 'HOME' ENTERED AT 11:31:22 ON 30 JUL 2007

=> file reg			
COST IN U.S. DOLLARS	SINCE FILE	TOTAL	
FULL ESTIMATED COST	ENTRY	SESSION	
	0.21	0.21	

FILE 'REGISTRY' ENTERED AT 11:31:40 ON 30 JUL 2007

=> s 9001-57-4/rn  
L1 1 9001-57-4/RN

=> d

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 9001-57-4 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN Fructofuranosidase, β- (CA INDEX NAME)  
OTHER NAMES:  
CN β-D-Fructofuranosidase  
CN β-D-Fructofuranoside fructohydrolase  
CN β-Fructofuranosidase  
CN β-Fructofuranoside fructohydrolase  
CN β-Fructopyranosidase  
CN β-Fructosidase  
CN β-h-Fructosidase  
CN β-Invertase  
CN E.C. 3.2.1.26  
CN exo-β-(2,6)-Fructofuranosidase  
CN Fructosylinvertase  
CN Glucosucrase  
CN Invertase  
CN Invertin  
CN Maxinvert L 1000  
CN Saccharase  
CN Sucrase  
CN Sucrose hydrolase  
CN Vacuolar invertase  
CN Validase Invertase  
MF Unspecified  
CI COM, MAN  
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CABA,  
CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN, CSCHEM, EMBASE, IFICDB,  
IFIPAT, IFIUDB, IPA, MRCK\*, MSDS-OHS, NAPRALERT, PIRA, PROMT, TOXCENTER,  
USPAT2, USPATFULL  
(\*File contains numerically searchable property data)  
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*  
(\*\*Enter CHEMLIST File for up-to-date regulatory information)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

10032 REFERENCES IN FILE CA (1907 TO DATE)

197 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
10051 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> sel 11 chem.  
E1 THROUGH E21 ASSIGNED

=> index bioscience  
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.74	2.95

=> s e1-21

1 FILE ADISCTI  
7 FILE ADISINSIGHT  
3 FILE ADISNEWS  
2234 FILE AGRICOLA  
143 FILE ANABSTR

5 FILES SEARCHED...

44 FILE ANTE  
9 FILE AQUALINE  
81 FILE AQUASCI  
818 FILE BIOENG  
10384 FILE BIOSIS

10 FILES SEARCHED...

1877 FILE BIOTECHABS  
1877 FILE BIOTECHDS  
1727 FILE BIOTECHNO

13 FILES SEARCHED...

4903 FILE CABA  
15971 FILE CAPLUS  
542 FILE CEABA-VTB  
11 FILE CIN  
160 FILE CONFSCI  
87 FILE CROPB  
115 FILE CROPU  
238 FILE DDFB  
197 FILE DDFU

22 FILES SEARCHED...

4698 FILE DGENE

23 FILES SEARCHED...

367 FILE DISSABS  
238 FILE DRUGB  
11 FILE DRUGMONOG2  
308 FILE DRUGU  
10 FILE EMBAL  
3754 FILE EMBASE  
2081 FILE ESBIOTBASE

30 FILES SEARCHED...

95 FILE FOREGE  
643 FILE FROSTI  
1578 FILE FSTA  
2665 FILE GENBANK  
4 FILE HEALSAFE  
1282 FILE IFIPAT

37 FILES SEARCHED...

3 FILE IMSDRUGNEWS  
3 FILE IMSPRODUCT

4 FILE IMSRESEARCH  
3 FILE KOSMET  
1818 FILE LIFESCI  
5126 FILE MEDLINE  
53 FILE NTIS  
12 FILE OCEAN  
3486 FILE PASCAL  
47 FILES SEARCHED...  
6 FILE PHAR  
8 FILE PHARMAML  
12 FILE PHIN  
114 FILE PROMT  
10 FILE PROUSDDR  
4 FILE RDISCLOSURE  
5953 FILE SCISEARCH  
2602 FILE TOXCENTER  
59 FILES SEARCHED...  
8072 FILE USPATFULL  
1244 FILE USPAT2  
61 FILES SEARCHED...  
7 FILE VETB  
19 FILE VETU  
29 FILE WATER  
64 FILES SEARCHED...  
1366 FILE WPIDS  
4 FILE WPIFV  
1366 FILE WPINDEX

61 FILES HAVE ONE OR MORE ANSWERS, 67 FILES SEARCHED IN STNINDEX

L2 QUE (B-D-FRUCTOFURANOSIDASE/BI OR "B-D-FRUCTOFURANOSIDE FRUCTOHYDROLASE"/BI OR B-FRUCTOFURANOSIDASE/BI OR "B-FRUCTOFURANOSIDE FRUCTOHYDROLASE"/BI OR B-FRUCTOPYRANOSIDASE/BI OR B-FRUCTOSIDASE/BI OR B-H-FRUCTOSIDASE/BI OR B-INVERTASE/BI OR "E.C. 3.2.1.26"/BI OR "EXO-B-(2,6)-FRUCTOFURANOSIDASE"/BI OR FRUCTOSYLVANEVERTASE/BI OR GLUCOSUCRASE/BI OR INVERTASE/BI OR INVERTIN/BI OR "MAXI INVERT L 1000"/BI OR SACCHARASE/BI OR SUCRASE/BI OR "SUCROSE HYDROLASE"/BI OR "VACUOLAR INVERTASE"/BI OR "VALIDASE INVERTASE"/BI OR 9001-57-4 /BI)

=> s 12 and (ginger or zingiber?)  
5 FILES SEARCHED...  
4 FILE BIOSIS  
1 FILE BIOTECHABS  
11 FILES SEARCHED...  
1 FILE BIOTECHDS  
13 FILES SEARCHED...  
21 FILE CABA  
7 FILE CAPLUS  
23 FILES SEARCHED...  
1 FILE DISSABS  
1 FILE EMBASE  
30 FILES SEARCHED...  
3 FILE FROSTI  
2 FILE FSTA  
5 FILE GENBANK  
5 FILE IFIPAT  
42 FILES SEARCHED...  
1 FILE MEDLINE

```
    1 FILE PASCAL
47 FILES SEARCHED...
    4 FILE PROMT
    1 FILE SCISEARCH
    1 FILE TOXCENTER
   66 FILE USPATFULL
60 FILES SEARCHED...
   15 FILE USPAT2
64 FILES SEARCHED...
    7 FILE WPIDS
    7 FILE WPINDEX
```

20 FILES HAVE ONE OR MORE ANSWERS, 67 FILES SEARCHED IN STNINDEX

L3 QUE L2 AND (GINGER OR ZINGIBER?)

```
=> s l3 and (peptide or polypeptide or protein)
3 FILES SEARCHED...
6 FILES SEARCHED...
    1 FILE BIOSIS
10 FILES SEARCHED...
    1 FILE BIOTECHABS
    1 FILE BIOTECHDS
13 FILES SEARCHED...
    3 FILE CABA
    1 FILE CAPLUS
15 FILES SEARCHED...
19 FILES SEARCHED...
21 FILES SEARCHED...
23 FILES SEARCHED...
25 FILES SEARCHED...
27 FILES SEARCHED...
29 FILES SEARCHED...
30 FILES SEARCHED...
    3 FILE GENBANK
35 FILES SEARCHED...
    5 FILE IFIPAT
40 FILES SEARCHED...
43 FILES SEARCHED...
46 FILES SEARCHED...
47 FILES SEARCHED...
    4 FILE PROMT
53 FILES SEARCHED...
57 FILES SEARCHED...
    46 FILE USPATFULL
60 FILES SEARCHED...
   10 FILE USPAT2
62 FILES SEARCHED...
    4 FILE WPIDS
65 FILES SEARCHED...
    4 FILE WPINDEX
```

12 FILES HAVE ONE OR MORE ANSWERS, 67 FILES SEARCHED IN STNINDEX

L4 QUE L3 AND (PEPTIDE OR POLYPEPTIDE OR PROTEIN)

```
=> d rank
F1      46  USPATFULL
F2      10  USPAT2
F3       5  IFIPAT
```

F4	4	PROMT
F5	4	WPIDS
F6	4	WPIINDEX
F7	3	CABA
F8	3	GENBANK
F9	1	BIOSIS
F10	1	BIOTECHABS
F11	1	BIOTECHDS
F12	1	CAPLUS

=> file f3-7 f9-12

COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
27.72	30.67

FULL ESTIMATED COST

FILE 'IFIPAT' ENTERED AT 11:58:39 ON 30 JUL 2007

COPYRIGHT (C) 2007 IFI CLAIMS(R) Patent Services (IFI)

FILE 'PROMT' ENTERED AT 11:58:39 ON 30 JUL 2007

COPYRIGHT (C) 2007 Gale Group. All rights reserved.

FILE 'WPIDS' ENTERED AT 11:58:39 ON 30 JUL 2007

COPYRIGHT (C) 2007 THE THOMSON CORPORATION

FILE 'WPIINDEX' ACCESS NOT AUTHORIZED

FILE 'CABA' ENTERED AT 11:58:39 ON 30 JUL 2007

COPYRIGHT (C) 2007 CAB INTERNATIONAL (CABI)

FILE 'BIOSIS' ENTERED AT 11:58:39 ON 30 JUL 2007

Copyright (c) 2007 The Thomson Corporation

FILE 'BIOTECHABS' ACCESS NOT AUTHORIZED

FILE 'BIOTECHDS' ENTERED AT 11:58:39 ON 30 JUL 2007

COPYRIGHT (C) 2007 THE THOMSON CORPORATION

FILE 'CAPLUS' ENTERED AT 11:58:39 ON 30 JUL 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

=> s 14

2 FILES SEARCHED...

4 FILES SEARCHED...

6 FILES SEARCHED...

L5 19 L4

=> dup rem 15

PROCESSING COMPLETED FOR L5

L6 13 DUP REM L5 (6 DUPLICATES REMOVED)

ANSWERS '1-5' FROM FILE IFIPAT

ANSWERS '6-9' FROM FILE PROMT

ANSWERS '10-12' FROM FILE CABA

ANSWER '13' FROM FILE BIOSIS

=> d bib abs 1-5, 10-13

L6 ANSWER 1 OF 13 IFIPAT COPYRIGHT 2007 IFI on STN DUPLICATE 1

AN 11043036 IFIPAT;IFIUDB;IFICDB Full-text  
TI PHYTASES, NUCLEIC ACIDS ENCODING THEM AND METHODS OF MAKING AND USING  
THEM  
INF Barton; Nelson Robert, San Diego, CA, US  
Baum; William, La Jolla, CA, US  
Garrett; James B., San Diego, CA, US  
Gray; Kevin A., San Diego, CA, US  
Kretz; Keith A., San Marcos, CA, US  
O'Donoghue; Eileen, San Diego, CA, US  
Robertson; Dan E., San Diego, CA, US  
Short; Jay M., Rancho Santa Fe, CA, US  
Zorner; Paul, Encinitas, CA, US  
IN Barton Nelson Robert; Baum William; Garrett James B; Gray Kevin A; Kretz  
Keith A; O'Donoghue Eileen; Robertson Dan E; Short Jay M; Zorner Paul  
PAF Unassigned  
PA Unassigned Or Assigned To Individual (68000)  
PPA Diversa Corp (Probable)  
AG DIVERSA C/O MOFO S.D., 3811 VALLEY CENTER DRIVE, SUITE 500, SAN DIEGO,  
CA, 92130, US  
PI US 2005281792 A1 20051222  
AI US 2004-933115 20040901  
RLI US 1999-259214 19990301 CONTINUATION 6110719  
US 1999-291931 19990413 CONTINUATION-IN-PART 6190897  
US 1999-318528 19990525 CONTINUATION-IN-PART 6183740  
US 2000-580515 20000525 CONTINUATION-IN-PART 6720014  
US 2001-866379 20010524 CONTINUATION-IN-PART 6855365  
US 1997-910798 19970813 DIVISION 5876997  
FI US 2005281792 20051222  
US 6110719  
US 6190897  
US 6183740  
US 6720014  
US 6855365  
US 5876997  
DT Utility; Patent Application - First Publication  
FS CHEMICAL  
APPLICATION  
OS CA 144:47744  
ED Entered STN: 23 Dec 2005  
Last Updated on STN: 23 Dec 2005  
PARN This application is a continuation in part (CIP) of U.S. patent  
application Ser. No. 09/866,379, filed May 24, 2001, which is a  
continuation-in-part of U.S. patent application Ser. No. 09/580, 515,  
filed May 25, 2000, which is a continuation-in-part of U.S. patent  
application Ser. No. 09/318,528, filed May 25, 1999, which is a  
continuation-in-part of U.S. patent application Ser. No. 09/291,931,  
filed Apr. 13, 1999, which is a continuation of U.S. patent application  
Ser. No. 09/259,214, filed Mar. 1, 1999, which is a divisional of U.S.  
patent application Ser. No. 08/ 910,798, now U.S. Pat. No. 5,876,997,  
filed Aug. 13, 1997, all of which are hereby incorporated by reference in  
their entirety for all purposes.  
CLMN 39  
GI 8 Figure(s).  
FIGS. 1a and 1b show the nucleotide and deduced amino acid sequences an  
exemplary enzyme of the present invention. Sequencing was performed using  
a 378 automated DNA sequencer (Applied Biosystems, Inc.).  
FIGS. 2A and 2B show the pH and temperature profile and stability data for  
the phytase enzyme of the present invention, as described in detail in  
Example 6, below.  
FIG. 3 shows a graph with the results of a thermal tolerance assay between

SEQ ID NO:8 (E. coli appA wild type) and an exemplary phytase of the invention having a sequence as set forth in SEQ ID NO:10 (modified phytase).

FIG. 4 shows a graph with the stability of phytase enzymes under simulated digestibility conditions.

FIG. 5 shows a graph with expression of wild-type and modified phytase (SEQ ID NO:10) in various host cells.

FIG. 6 shows a graph of residual phytase activity in SGF with pepsin.

FIGS. 7A and 7B show the nucleotide sequence of E. coli appA phytase (SEQ ID NO:7, encoding the E. coli appA wild type phytase SEQ ID NO:8).

FIG. 8 shows the amino acid sequence of E. coli appA phytase (SEQ ID NO:8) and an exemplary phytase of the invention having a sequence as set forth in SEQ ID NO:10 (a modified phytase).

OF 13 IFIPAT COPYRIGHT 2007 IFI on STN

DUPLICATE 1

AB In one aspect, the invention provides a purified and modified phytase enzyme from Escherichia coli K12 appA phytase. The enzyme has phytase activity and improved thermal tolerance as compared with the wild-type enzyme. In addition, the enzyme has improved protease stability at low pH. Glycosylation of the modified phytase provided a further improved enzyme having improved thermal tolerance and protease stability. The enzyme can be produced from native or recombinant host cells and can be used to aid in the digestion of phytate where desired. In one aspect, the phytase of the present invention can be used in foodstuffs to improve the feeding value of phytate rich ingredients.

CLMN 39 8 Figure(s).

FIGS. 1a and 1b show the nucleotide and deduced amino acid sequences an exemplary enzyme of the present invention. Sequencing was performed using a 378 automated DNA sequencer (Applied Biosystems, Inc.).

FIGS. 2A and 2B show the pH and temperature profile and stability data for the phytase enzyme of the present invention, as described in detail in Example 6, below.

FIG. 3 shows a graph with the results of a thermal tolerance assay between SEQ ID NO:8 (E. coli appA wild type) and an exemplary phytase of the invention having a sequence as set forth in SEQ ID NO:10 (modified phytase).

FIG. 4 shows a graph with the stability of phytase enzymes under simulated digestibility conditions.

FIG. 5 shows a graph with expression of wild-type and modified phytase (SEQ ID NO:10) in various host cells.

FIG. 6 shows a graph of residual phytase activity in SGF with pepsin.

FIGS. 7A and 7B show the nucleotide sequence of E. coli appA phytase (SEQ ID NO:7, encoding the E. coli appA wild type phytase SEQ ID NO:8).

FIG. 8 shows the amino acid sequence of E. coli appA phytase (SEQ ID NO:8) and an exemplary phytase of the invention having a sequence as set forth in SEQ ID NO:10 (a modified phytase).

L6 ANSWER 2 OF 13 IFIPAT COPYRIGHT 2007 IFI on STN DUPLICATE 2

AN 10746043 IFIPAT; IFIUDB; IFICDB Full-text

TI FOOD BAR FOR TREATING MUSCULOSKELETAL DISORDERS; ANTIARTHRITIC

NUTRACEUTICALS; LARGE DAILY DOSAGE OF A GLUCOSAMINE SALT, A

PROTEIN, A FLAVOR, A VITAMIN B, C, OR E, AND DIETARY FIBER;

IMPROVED JOINT MOBILITY; FAST ABSORBING, NON-STEROIDAL, VASODILATION

INF Barr; Teresa Leigh, Port Townsend, WA, US

Martin; Kenneth A., Maumelle, AR, US

IN Barr Teresa Leigh; Martin Kenneth A

PAF Unassigned

PA Unassigned Or Assigned To Individual (68000)

AG BUSKOP LAW GROUP, P.C., 1717 ST. JAMES PLACE, SUITE 500, HOUSTON, TX,  
77056, US

PI US 2004253296 A1 20041216

AI US 2003-725611 20031202  
RLI US 2002-241542 20020911 CONTINUATION-IN-PART 6660308  
FI US 2004253296 20041216  
US 6660308  
DT Utility; Patent Application - First Publication  
FS CHEMICAL  
APPLICATION  
OS CA 142:43819  
ED Entered STN: 20 Dec 2004  
Last Updated on STN: 4 Jan 2007  
CLMN 32  
AB The food bar usable for treating arthritic conditions is made of from about 250 mg to about 2500 mg of 2-amino-2-deoxyglucose sulfate, 2-amino-2-deoxyglucose sulfate hydrochloride, n-acetyl 2-amino-2-deoxyglucose sulfate, or combinations thereof; from about 200 mg to about 2000 mg of protein; from about 10 mg to about 8000 mg of a flavoring; from about 100 mg to about 2500 mg of a Vitamin B, Vitamin C, Vitamin E or complexes thereof; and from about 1000 mg to about 9000 mg of a fiber. A method for improving joint mobility in a subject comprising administering to the subject an amount of the food bar involves administering to a subject an amount of the supplement on a regular basis.  
CLMN 32  
  
L6 ANSWER 3 OF 13 IFIPAT COPYRIGHT 2007 IFI on STN DUPLICATE 3  
AN 10746042 IFIPAT;IFIUDB;IFICDB Full-text  
TI PERIOPERATIVE MULTIVITAMIN PROTEIN BAR FOR USE IN PREPARING AN INDIVIDUAL FOR FAST SURGICAL RECOVERY; MIXTURE CONTAINING DIGESTION ENZYME, VITAMINS, AMINO ACID  
INF Barr; Teresa Leigh, Port Townsend, WA, US  
Martin; Kenneth A., Maumelle, AR, US  
IN Barr Teresa Leigh; Martin Kenneth A  
PAF Unassigned  
PA Unassigned Or Assigned To Individual (68000)  
AG BUSKOP LAW GROUP, P.C., 1717 ST. JAMES PLACE, SUITE 500, HOUSTON, TX, 77056, US  
PI US 2004253295 A1 20041216  
AI US 2003-725609 20031202  
RLI US 2002-241542 20020911 CONTINUATION-IN-PART 6660308  
FI US 2004253295 20041216  
US 6660308  
US 6900173 20050531  
DT Utility; Patent Application - First Publication  
FS CHEMICAL  
APPLICATION  
OS CA 142:62697  
ED Entered STN: 20 Dec 2004  
Last Updated on STN: 4 Jan 2007  
CLMN 18  
AB The perioperative multivitamin protein bar for promoting an anabolic state in a person is made of from about 250 mg to about 2500 mg of a digestive enzyme, such as bromelain, pepsin, amylase, protease, lipase, cellulase, lactase, alpha-g, glucoamylase, invertase, malt diastase, pectinase, xylanase, bromelain, betain, trypsin, or combinations thereof; from about 50 mg to about 2500 mg of an amino acid; from about 200 mg to about 2000 mg of a sea plant; from about 10 mg to about 8000 mg of a flavoring; from about 100 mg to about 2500 mg of Vitamin A, Vitamin B, Vitamin D, Vitamin E, Vitamin K, calcium, complexes thereof, or combinations thereof; and from about 1000 mg to about 9000 mg of a fiber.  
CLMN 18

L6 ANSWER 4 OF 13 IFIPAT COPYRIGHT 2007 IFI on STN DUPLICATE 4  
AN 10745974 IFIPAT;IFIUDB;IFICDB Full-text  
TI PERIOPERATIVE MULTIVITAMIN PROTEIN BEVERAGE AND ADDITIVE FOR  
USE IN PREPARING AN INDIVIDUAL FOR FAST SURGICAL RECOVERY; MIXTURE OF  
ENZYMES, AMINO ACIDS, SEAWEED AND DERIVATIVES, FLAVORS, VITAMINS, FIBERS  
AND FLUIDS, USED FOR PROMOTING METABOLISM  
INF Barr; Teresa Leigh, Port Townsend, WA, US  
Martin; Kenneth A., Maumelle, AR, US  
IN Barr Teresa Leigh; Martin Kenneth A  
PAF Unassigned  
PA Unassigned Or Assigned To Individual (68000)  
AG BUSKOP LAW GROUP, P.C., 1717 ST. JAMES PLACE, SUITE 500, HOUSTON, TX,  
77056, US  
PI US 2004253227 A1 20041216  
AI US 2003-725610 20031202  
RLI US 2002-241542 20020911 CONTINUATION-IN-PART 6660308  
FI US 2004253227 20041216  
US 6660308  
DT Utility; Patent Application - First Publication  
FS CHEMICAL  
APPLICATION  
OS CA 142:56670  
ED Entered STN: 20 Dec 2004  
Last Updated on STN: 4 Jan 2007  
CLMN 37  
AB The perioperative multivitamin protein additive for promoting an anabolic state in a person, is made of from about 250 mg to about 2500 mg a digestive enzyme, such as bromelain, pepsin, amylase, protease, lipase, cellulase, lactase, alpha-g, glucoamylase, invertase, malt diastase, pectinase, xylanase, bromelain, betain, and trypsin, or combinations thereof; from about 50 mg to about 2500 mg of an amino acid; from about 200 mg to about 2000 mg of a sea plant; from about 10 mg to about 8000 mg of a flavoring; from 100 mg to 2500 mg o Vitamin A, Vitamin B, Vitamin D, Vitamin E, Vitamin K and calcium, complexes thereof, and combinations thereof; and from about 1000 mg to about 9000 mg of a fiber. The perioperative multivitamin protein additive can be added to an ingestible liquid in order to form a perioperative multivitamin protein beverage.  
CLMN 37

L6 ANSWER 5 OF 13 IFIPAT COPYRIGHT 2007 IFI on STN  
AN 04247636 IFIPAT;IFIUDB;IFICDB Full-text  
TI PERIOPERATIVE MULTIVITAMIN PROTEIN BAR FOR USE IN PREPARING AN  
INDIVIDUAL FOR FAST SURGICAL RECOVERY; MIXTURE CONTAINING DIGESTION  
ENZYME, VITAMINS, AMINO ACID  
INF Barr; Teresa Leigh, P.O. Box 1500, Port Townsend, WA, 98368, US  
Martin; Kenneth A., 8907 Kanis Rd., Suite 330, Little Rock, AR, 72205, US  
IN Barr Teresa Leigh; Martin Kenneth A  
PAF Unassigned  
PA Unassigned Or Assigned To Individual (68000)  
EXNAM Peselev, Elli  
AG Buskop Law Group, P.C.  
Buskop, Wendy  
PI US 6900173 B2 20050531  
US 2004253295 A1 20041216  
AI US 2003-725609 20031202  
XPD 11 Sep 2022  
RLI US 2002-241542 20020911 CONTINUATION-IN-PART 6660308  
FI US 6900173 20050531  
US 6660308  
US 2004253295 20041216

DT Utility; Granted Patent - Utility, with Pre-Grant Publication  
FS CHEMICAL  
GRANTED  
ED Entered STN: 2 Jun 2005  
Last Updated on STN: 6 Feb 2006  
PARN The present application is CIP and claims priority to U.S. patent application Ser. No. 10/241,542 filed on Sep. 11, 2002 and issued as U.S. Pat. No. 6,660,308, on Dec. 9, 2003.  
NTE This Patent is subject to a Terminal Disclaimer.  
CLMN 16  
OF 13 IFIPAT COPYRIGHT 2007 IFI on STN  
AB The perioperative multivitamin protein bar for promoting an anabolic state in a person is made of from about 250 mg to about 2500 mg of a digestive enzyme, such as bromelain, pepsin, amylase, protease, lipase, cellulase, lactase, alpha-g, glucoamylase, invertase, malt diastase, pectinase, xylanase, bromelain, betain, trypsin, or combinations thereof; from about 50 mg to about 2500 mg of an amino acid; from about 200 mg to about 2000 mg of a sea plant; from about 10 mg to about 8000 mg of a flavoring; from about 100 mg to about 2500 mg of Vitamin A, Vitamin B, Vitamin D, Vitamin E, Vitamin K, calcium, complexes thereof, or combinations thereof; and from about 1000 mg to about 9000 mg of a fiber.  
NTE This Patent is subject to a Terminal Disclaimer.  
CLMN 16

L6 ANSWER 10 OF 13 CABA COPYRIGHT 2007 CABI on STN  
AN 2001:127833 CABA Full-text  
DN 20013038727  
TI Effect of cytozyme on vegetative characters and yield of banana cvs. Nendran (AAB) and Karpuravalli (ABB)  
AU Vijayalakshmi, K.; Mathan, K. K.  
CS Department of Soil Science and Agricultural Chemistry, Tamil Nadu Agricultural University, Coimbatore 641 003, India.  
SO International Journal of Tropical Agriculture, (2000) Vol. 18, No. 1, pp. 55-61. 15 ref.  
Publisher: Vidya International Publishers. Hisar  
ISSN: 0254-8755  
CY India  
DT Journal  
LA English  
ED Entered STN: 6 Dec 2001  
Last Updated on STN: 6 Dec 2001  
AB Cytozyme contains gibberellic acid, IAA, cytokinins and biologically active micronutrients along with enzymes such as diastase [[alpha]-glucosidase], maltase [[alpha]-glucosidase], invertase [[beta]-fructofuranosidase], cellulase, and hydrolysed protein complexes plus hormones. The effect of cytozyme was studied on the growth, yield and quality of banana during 1995-97. The cytozyme treatments were given with the recommended doses of NPK at 6, 12 and 18 kg/ha levels and in combination with foliar spray of cytozyme at 0.1%. The results revealed that application of cytozyme granules @ 18 kg/ha along with 0.1% foliar spray increased the pseudostem height and girth to the highest by 18.3 and 16.0%, and leaf area by 39.5%. The bunch yield of banana cv. Nendran increased by 21.4% over control (31.8 t/ha). Similarly, in the second crop of banana cv. Karpuravalli also a 8.9% increase in girth, a 22.5% increase in leaf area, and a 34.7% increase in yield (36.1 t/ha) over the control was recorded.

L6 ANSWER 11 OF 13 CABA COPYRIGHT 2007 CABI on STN  
AN 94:83496 CABA Full-text  
DN 19940306561

TI Changes in enzyme activities in organ forming and non-organ forming callus cultures of *Kaempferia galanga* L  
AU Vincent, K. A.; Bejoy, M.; Kavikishor Hariharan; Hariharan, M.; Hariharan, K.  
CS Department of Botany, University of Calicut, Calicut 673 635, Kerala, India.  
SO Phytomorphology, (1992) Vol. 42, No. 3-4, pp. 241-244. 21 ref.  
ISSN: 0031-9449  
DT Journal  
LA English  
ED Entered STN: 1 Nov 1994  
Last Updated on STN: 1 Nov 1994  
AB Total starch, total sugars, reducing sugars, soluble proteins and total phenolic compounds accumulated considerably during organogenesis in callus cultures of *K. galanga*. While there was no difference in the specific activity of amylase, the activities of peroxidase, catalase, IAA-oxidase and invertase [ $\beta$ -fructofuranosidase] were significantly higher in organ-forming callus than in non-organ forming callus. The activity of malate dehydrogenase was higher in non-organ forming callus.

L6 ANSWER 12 OF 13 CABA COPYRIGHT 2007 CABI on STN  
AN 84:141780 CABA Full-text  
DN 19841302242  
TI Biochemical analysis in leaf spot disease of turmeric: some hydrolysing and oxidative enzymes and related chemical metabolites  
AU Agarwal, M. L.; Kumar, S.; Goel, A. K.; Tayal, M. S.  
CS Dep. Bot., DAV Coll., Muzaffarnagar 251 001, India.  
SO Indian Phytopathology, (1982) Vol. 35, No. 3, pp. 438-441. 2 fig. 26 ref.  
ISSN: 0367-973X  
DT Journal  
LA English  
ED Entered STN: 1 Nov 1994  
Last Updated on STN: 1 Nov 1994  
AB *Curcuma longa* leaves infected by *Taphrina maculans* possessed higher levels of total phenols, o-dihydric phenols, IAA, reducing sugars and lower contents of chlorophylls, starch, total sugars, non-reducing sugars and proteins than healthy leaves. Peroxidase, amylase and invertase activities increased with disease development while that of IAA-oxidase and polyphenol oxidase decreased.

L6 ANSWER 13 OF 13 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN  
AN 1994:166540 BIOSIS Full-text  
DN PREV199497179540  
TI Changes in enzyme activities in organ forming and non-organ forming callus cultures of *Kaempferia galanga* L.  
AU Vincent, K. A.; Bejoy, M.; Kavikishor, P. B.; Hariharan, Molly [Reprint author]  
CS Dep. Bot., Univ. Calicut, Calicut-673635 Kerala, India  
SO Phytomorphology, (1992 (1993)) Vol. 42, No. 3-4, pp. 241-244. .  
CODEN: PHYMAW. ISSN: 0031-9449.  
DT Article  
LA English  
ED Entered STN: 8 Apr 1994  
Last Updated on STN: 10 Apr 1994  
AB Total starch, total sugars, reducing sugars, soluble proteins and total phenolic compounds accumulated considerably during the organogenesis in callus cultures of *Kaempferia galanga*. While there was no difference in the specific

activity of amylase, other enzyme activities such as peroxidase, catalase, IAA - oxidase and invertase (but not malate dehydrogenase) were significantly higher in the organ - forming (OF) callus than in non-organ forming (NOF) callus.

=> log y

COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	148.44	179.11

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